

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To:

see form PCT/ISA/220

PCT

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/GB2004/003677

International filing date (day/month/year)
27.08.2004

Priority date (day/month/year)
29.08.2003

International Patent Classification (IPC) or both national classification and IPC
B29D11/00

Applicant
VISAQ LIMITED

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☒ Box No. II Priority
- ☒ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☒ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☒ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1 bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



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**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

10/5/0558
International application No.
PCT/GB2004/003677

IAF200501 27 FEB 2006

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
 - ☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
 - ☐ a sequence listing
 - ☐ table(s) related to the sequence listing
 - b. format of material:
 - ☐ in written format
 - ☐ in computer readable form
 - c. time of filing/furnishing:
 - ☐ contained in the international application as filed.
 - ☐ filed together with the international application in computer readable form.
 - ☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/GB2004/003677

Box No. II Priority

1. ☒ The following document has not been furnished:

☒ copy of the earlier application whose priority has been claimed (Rule 43*bis*.1 and 66.7(a)).

☐ translation of the earlier application whose priority has been claimed (Rule 43*bis*.1 and 66.7(b)).

Consequently it has not been possible to consider the validity of the priority claim. This opinion has nevertheless been established on the assumption that the relevant date is the claimed priority date.

2. ☐ This opinion has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rules 43*bis*.1 and 64.1). Thus for the purposes of this opinion, the international filing date indicated above is considered to be the relevant date.

3. Additional observations, if necessary:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/GB2004/003677

Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be industrially applicable have not been examined in respect of:

- ☐ the entire international application,
- ☒ claims Nos. 17-23

because:

- ☐ the said international application, or the said claims Nos. relate to the following subject matter which does not require an international preliminary examination (*specify*):
- ☒ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. 24,25 are so unclear that no meaningful opinion could be formed (*specify*):
see separate sheet
- ☐ the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed.
- ☒ no international search report has been established for the whole application or for said claims Nos. 17-23
- ☐ the nucleotide and/or amino acid sequence listing does not comply with the standard provided for in Annex C of the Administrative Instructions in that:
 - the written form ☐ has not been furnished
 - ☐ does not comply with the standard
 - the computer readable form ☐ has not been furnished
 - ☐ does not comply with the standard
- ☐ the tables related to the nucleotide and/or amino acid sequence listing, if in computer readable form only, do not comply with the technical requirements provided for in Annex C-*bis* of the Administrative Instructions.
- ☐ See separate sheet for further details

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/GB2004/003677

Box No. IV Lack of unity of invention

1. ☒ In response to the invitation (Form PCT/ISA/206) to pay additional fees, the applicant has:
- ☐ paid additional fees.
 - ☐ paid additional fees under protest.
 - ☒ not paid additional fees.
2. ☐ This Authority found that the requirement of unity of invention is not complied with and chose not to invite the applicant to pay additional fees.
3. This Authority considers that the requirement of unity of invention in accordance with Rule 13.1, 13.2 and 13.3 is
- ☐ complied with
 - ☒ not complied with for the following reasons:
see separate sheet
4. Consequently, this report has been established in respect of the following parts of the international application:
- ☐ all parts.
 - ☒ the parts relating to claims Nos. 1-7

Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement
- | | | |
|-------------------------------|-------------|-----|
| Novelty (N) | Yes: Claims | 1-7 |
| | No: Claims | |
| Inventive step (IS) | Yes: Claims | 1-7 |
| | No: Claims | |
| Industrial applicability (IA) | Yes: Claims | 1-7 |
| | No: Claims | |
2. Citations and explanations
- see separate sheet**

Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

see separate sheet

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING
AUTHORITY (SEPARATE SHEET)**

International application No.

PCT/GB2004/003677

Re Item IV.

The separate inventions/groups of inventions are:

1-7

A method of moulding contact lenses comprising initiating curing whilst a pathway is open between the moulding cavity and the reservoir.

17-19

Apparatus for moulding a contact lens including a timing means and a triggering means

20-23

Apparatus for moulding contact lenses comprising an oven with rollers wherein at least one roller is vertically displaced upwardly of the others.

They are not so linked as to form a single general inventive concept (Rule 13.1 PCT) for the following reasons:

The application concerns a method and apparatus for moulding contact lenses.

First regarding clarity and support. The insertion means of claim 8 has no technical features, nor are any apparent from the description. Also the reservoir is a result achieved during use of the male and female moulds. The insertion means appears indeterminate and the insertion may even be done by hand. Similarly the ram means is any means which can be used to apply a force to the mould assembly- that this is done from a second position and to form a reservoir are results and features of the use of the apparatus.

The reasons for which the present application has been deemed to contain 3 inventions which are not linked such that they form a single general inventive concept, as required by Rules 13.1, 13.2 and 13.3, PCT are as follows:

The prior art has been identified as: US-A-4284399

For claim 8 this discloses male and female moulds (which in any case have ben inserted to form a reservoir) (see figs. 1 and 2) and a ram means (see the "weight" in col. 2 lines 26 to 31). The features of claims 9-16 are either not novel or design alternatives which would be usual practice for a skilled man. The steps (a),(b), (c), (f),(g) of claim 1 are disclosed. Similar arguments apply to the other documents in the search report.

Invention I:

From which analysis follows that the following technical features of claim 1 can be seen to make a contribution over this prior art (Special Technical Features (S.F.), (Rule 13.2 PCT)):

- initiating curing whilst keeping the pathway open
- applying the external force to insert the male mould further into the female mould to close the cavity

From these S.F. the objective problem to be solved by the 1st invention can be construed as:

to provide a method which enables reduction of gas bubble imperfections in the final lens

Invention II:

From a comparison of the disclosure of this prior art and the technical features of claim 17-19 the following features can be seen to make a contribution over this prior art (Special Technical Features (S.F.), (Rule 13.2 PCT)):

- a timing means,
- a triggering means

From these, the objective problem to be solved can be construed as:

to provide an apparatus which reduces variation in the finished lenses due to variation in curing times.

Invention 3:

From a comparison of the disclosure of this prior art and the technical features of claim 20-23 the following features can be seen to make a contribution over this prior art (Special Technical Features (S.F.), (Rule 13.2 PCT)):

a row of rollers wherein at least one roller is displaced vertically upwardly of the others.

From these, the objective problem to be solved can be construed as:

to provide an apparatus which guides the tray through the oven.

The above analysis shows that the special technical features of invention I are neither the same as nor corresponding to those of invention II nor the same as or corresponding to those of invention 3.

In conclusion, therefore, the 3 groups of claims are not linked by common or corresponding special technical features and define 3 different inventions not linked by a single general inventive concept.

The application, hence does not meet the requirements of Unity of Invention as defined in Rules 13.1 & 13.2 PCT.

Re Item V.

1 The following documents are referred to in this communication:

D1 : US 4 284 399 A (NEWCOMB PAUL D ET AL) 18 August 1981 (1981-08-18)

D2 : GB 2 191 144 A (COOPERVISION OPTICS) 9 December 1987 (1987-12-09)

D3 : US 5 143 660 A (HAMILTON RONALD S ET AL) 1 September 1992 (1992-09-01)

D4 : WO 93/04848 A (BAUSCH & LOMB) 18 March 1993 (1993-03-18)

2 INDEPENDENT CLAIM 1

- 2.1 The subject-matter of independent claim 1 differs from D1 : see Item IV above.

The subject-matter of claim 1 is therefore novel (Article 33(2) PCT)
The problem to be solved by the present invention may be regarded as:
to provide a method which enables reduction of gas bubble imperfections in
the final lens

The solution to this problem proposed in claim 1 of the present application is
considered as involving an inventive step (Article 33(3) PCT) for the following
reasons:

the non disclosed steps (d) and (e) enable gas is able to escape during
polymerisation hence reducing bubbles in the final product. This is not hinted or
taught in the prior art.

Claims 2-7 are dependent on claim 1 and as such also meet the requirements of
the PCT with respect to novelty and inventive step.

- 2.2 Similar arguments apply to D2,D3 and D4 for both independent claim 1 and
dependent claims 2-7. Not that the compression chamber of D* applies a force to
the moulds and is, therefore, a ram means. Also even it would be argued that
some documents disclose a female mould into a male mould this juxtaposition
would be an obvious alternative to a skilled man.

Re Item VII.

- 1 For Articles 5 and 6 PCT see Item IV above. The insertion means is not defined in
the application and the features of the male and female moulds enabling the
formation of the reservoir are not in the claims.
- 2 Also claims 24 and 25 do not contain any technical features and are not
allowable.